Reviewer's report

Title: Association of a genetic variant in the Angiopoietin-like protein 4 gene with Metabolic Syndrome

Version: 0 Date: 19 Jan 2019

Reviewer: M Nourbakhsh

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The manuscript entitled "Association of a genetic variant in the Angiopoietin-like protein 4 gene with Metabolic Syndrome" presents the results of the study about a genetic risk factor for metabolic syndrome and has found a variant in ANGPTL4 to be linked to metabolic syndrome. The results are interesting but they could be more comprehensive considering some revisions.

In the study population the information is very scant. The ethnic origin of the participants is not explained; this is especially important in population-based studies such as genetic variant analysis. Inclusion and exclusion criteria are not mentioned. Since the study includes investigating the relationship between lipid profile, blood pressure, glycemic control and metabolic syndrome in general the subjects should have been selected carefully and factors such as taking antihypertensive, lipid lowering or anti-diabetic drugs, diet, lacking other inflammatory illnesses (esp. with regard to the CRP) should have been taken into account.

Pls briefly explain the IDF criteria for the diagnosis of metabolic syndrome.

Pls explain why ANGPTL4 concentration has not been measured.

It would have been beneficial if other parameters such as indices of insulin resistance and cardiovascular risk had been assessed.

The discussion part is not very well-written. It does not have the logical sequence of data, the presentation of the results of the previous studies are very cluttered and disarranged. It is highly recommended that this part is rewritten in a more organized and comprehensible fashion without repetition of the similar findings. Some informative articles about ANGPTL4 are missing from the discussion and are recommended to be included as follows


ANGPTL4 variants and their haplotypes are associated with serum lipid levels, the risk of coronary artery disease and ischemic stroke and atorvastatin cholesterol-lowering responses. Nutr Metab (Lond). 2018 Oct 5;15:70.


Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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